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## **After Sochi 2014: costs and impacts of Russia's Olympic Games**

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## After Sochi 2014: costs and impacts of Russia's Olympic Games

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This paper assesses the outcomes of the 2014 Winter Olympic Games in Sochi, Russia, examining the costs and economic impacts of the event, the prospects for the long-term use of venues and infrastructure, and the attitudes of the global and the Russian population. Total costs were \$55 billion, having increased 4.5 times from \$12 billion at the time of the bid. Of this total, about \$16 billion were sports-related costs. After accounting for inflation, this makes Sochi the second-most expensive Olympics ever in terms of sports-related costs and the most expensive Olympics in terms of cost per event. With a public share of 96.5 percent of funding, the Sochi Games had the highest proportion of public money for any Olympic Games on record. The benefit from this high cost, however, is limited. Extensive construction led to hotel overcapacities, investors defaulted on state-backed loans, and there is no coherent plan for the after use of venues and some of the largest infrastructure projects. As a consequence, the Sochi Olympics will continue to be a burden for the Russian state, with expenses for operation, maintenance, and foregone interest and tax revenue in the order of \$1.2 billion per year. The event also did not manage to improve the image of Russia in the world. Among the domestic population, support dropped over the seven years of its implementation, most notably among the local population.

**Keywords:** Olympic Games; Sochi; mega-event; mega-project; costs; benefits; tourism; infrastructure

### Introduction

It was one of the biggest events in 2014, not just for Russia but also for the world. The 2014 Winter Olympic Games, held between 7 February and 23 February in Sochi on the Black Sea Coast, broke a series of records. They had the highest number of participating nations (88), the highest number of athletes (2873), and the highest number of events (98) of any Winter Games. At \$1.26 billion, they also produced the highest revenue from broadcasting rights ever (IOC 2014). Less than three decades earlier, the 1988 Winter Games in Calgary were barely half as large, which exemplifies the tremendous growth of the event, defying attempts on the part of the IOC to contain “gigantism” (Chappelet 2014). The Sochi Games were also among the top 10 of Wikipedia articles that were most frequently edited and viewed in 2014, further attesting to the public interest in the event (Keegan 2015). But the one record that Sochi will be remembered for is a more dubious one: the most expensive Olympic Games ever – Summer or Winter. The figure most frequently cited for total costs is \$51 billion (1526 billion rubles), although the actual figure is around \$55 billion (1651 billion rubles).

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But the Olympic Games in Sochi were more than a mere sports event. The vast funds spent on it and the priority it enjoyed in Russia were meant to serve two major goals. First, to expedite regional development in one big push, building state-of-the-art infrastructure and catapulting Sochi into a league of world-class resorts to rival the global winter sports elite of the likes of Zermatt, Vail, and Whistler. It was this goal that President Putin highlighted in the pitch he made to the IOC at its meeting in Guatemala in 2007: “Sochi is going to become a new world class resort for the new Russia. And the whole world!” (Putin 2007). The second goal was to present to the outside world a new face of Russia as an open, modern, and attractive country. Large posters at the Sochi Olympics declared “Russia – Great, New, Open!” and the state-owned Sberbank, a major sponsor of the mega-event, proclaimed the global ambitions of the event: “Sochi today, the world tomorrow” – a phrase whose ominous undertones became reality a few days after the Olympics with the invasion of Crimea (Biersack and O’Lear 2014; Dunn and Bobick 2014).

The twin goals of big push regional development and imagineering on the global stage reflect two of the major political dynamics in today’s Russia. On the one hand, there is the strong role of the federal state in regional development, which in the so-called vertical of power allocates resources to the development of regions, often through large “national projects” or federal target programs (Argenbriht 2011; Dixon 2010; Kinossian and Morgan 2014; Orttung and Zhemukhov 2014; Remington 2015). In the absence of a functional regional development policy, these ad hoc approaches have led to an increasingly polarized form of regional development and have been unable to alleviate the persistence of regional inequalities (Gel’man and Ryzhenkov 2011; Kinossian 2013; Lankina 2009). As a national project of the highest priority, the Sochi Games were an extreme form of regional policy directed at one region, funded, administered, and delivered by the central state. On the other hand, the Sochi Games reflect the government’s desire to demonstrate to the rest of the world and to its own population that Russia can be a world leader in such areas as technology, infrastructure, leisure, and quality of life (Mäkinen 2011) – all of which Sochi was meant to showcase. Ultimately, these goals tie in with Russia’s quest to shore up its soft power on the international stage (Alekseyeva 2014; Feklyunina 2008) but also with the often-proclaimed “modernization,” which implies raising Russia’s technological and infrastructural capabilities, promoting economic investment, and making the country more attractive to the outside world, both to investors and to tourists.

With the benefit of hindsight, this article takes a look at the ambitions linked to the Sochi 2014 mega-event and compares them to the actual outcomes. It does so by covering the themes that were most prominent in the official and public rhetoric: the costs, cost overruns, and economic impact of the event; the implications for tourism in the region; the long-term use of venues and infrastructure; and the image of Russia and the Games at the local, national, and international levels. In so doing, this paper presents the first full account of costs and cost overruns, separating out different types of costs and comparing them to other events. While focusing on the economic, infrastructural, and image impacts of the event, the paper recognizes the importance of other aspects of the Sochi Games, in areas such as housing and displacement (Karbainov 2013), Russia’s great power narrative (Petersson 2014), human rights (Lenskyj 2014; Van Rheeën 2014), security (Zhemukhov and Orttung 2014), social protest and ethnic conflict (Arnold and Foxall 2014; Zhemukhov 2009), and the environment (Müller 2015a).

The material for the analysis is drawn from official reports by companies and organizations, either involved in organizing the Sochi Olympic Games (e.g. the Sochi

Organizing Committee of the Olympic Games, the IOC, and the Olympic delivery agency Olimpstroy) or in evaluating them and their consequences (Fund for the Fight Against Corruption, Fitch Ratings, and Pew Research Center), and coverage by independent, quality newspapers in Russia (Vedomosti, Gazeta.ru, Kommersant, and Moscow Times) or news agencies (AP). For representing the view of the Russian Government, it draws on official speeches and statements by government officials and state-run news media (e.g. RIA or RT, formerly *Russia Today*).

### The costs of the Sochi games

The superlative that will dominate public memory with regard to Sochi is not athletic but financial, “the most expensive Olympics ever.” Most Western media reported this fact as a sign of the megalomaniac extravaganza that the event had turned into. The figure of \$51 billion has become the de facto accepted total cost of the event by virtue of its frequent repetition in the media. It does not represent, however, the final cost nor does it encompass all costs for the Sochi 2014 Games. The figure originated from an estimate of construction costs by Olimpstroy, the state company in charge of most of the infrastructure construction for the Olympics, from one year before the Games, on 4 February 2013. At that time, Olimpstroy forecast the total cost of construction at RUB 1525.9 billion (or \$51.4 billion at the exchange rate of that day) (Sterkin 2013).

But what was the final cost of the Sochi Olympics? The Russian Government has not presented a final accounting of all costs, and answering this question is far from straightforward because much depends on what is included in the cost. Table 1 attempts an estimation of costs, based on public sources. It divides costs into three major categories:

- *Operational costs*: the costs of running the event itself. The largest items are typically salaries for staff and IT equipment, but the costs also include things such as transport, temporary venue overlay, accommodation of delegations, ceremonies, and so on. The operation of the event is the responsibility of the organizing committee of the Olympic Games, the so-called OCOG, but not all costs are contained in the OCOG budget. Security costs, for example, are often separate, which was also the case for Sochi.
- *Sports-related capital costs*: the construction cost of all event-related buildings required by the IOC, i.e. the venues, the Olympic villages, and the media centers, but also that of supporting infrastructure (electricity supply, telecommunications, road access, water and sewage, etc.).
- *Non-sports-related capital costs*: all infrastructures not required for the immediate construction and operation of sports-related venues, e.g. hotels, power stations, new roads, and railway connections, an expansion of the airport, new train stations, etc.

This division makes it possible to distinguish between direct costs (i.e. operational and sports-related capital costs) and indirect costs (non-sports-related capital cost).

Adding up these costs produces a figure higher than the frequently reported \$51 billion: the total costs linked to the 2014 Sochi Olympics were just under \$55 billion (RUB 1652 billion) (see Table 1).<sup>1</sup> More than 90 percent of the costs were capital costs, indicating the large share of construction for these Olympics (see Figure 1 for an overview of the most important construction). Indeed, such a high proportion of capital costs

Table 1. Breakdown of total budget by type of cost (operational, sports-related capital, sports-related supporting infrastructure, and non-sports-related capital).

Costs	Planned [2007]	Actual [2014] \$million	Cost overrun (nominal, percent)	Funding source	After use
TOTAL	12,287	54,914	347	—	—
Operational costs	1648	4249	158	—	—
Organizing Committee	1391	2327	67	ca. 75 percent private	—
Security	257	1922*	647	Public	—
Capital costs	10,638	50,665	376	Mostly public	—
Sports-related capital costs	n/a	11,894	n/a	—	—
Direct sports-related capital costs	1052	7532	585	Mostly public	—
<i>Coastal cluster</i>					
Olympic stadium	51	631	1131	Public	Concerts, World Cup 2018
Large hockey stadium	164	336	105	Public	Multi-purpose stadium
Small hockey stadium	24	116	382	Private	National sports center for children
Curling arena	11	24	113	State-secured loan	Multi-purpose stadium
Speed skating oval	28	246	790	State company	Tennis academy
Figure skating stadium	38	270	610	Public	Velodrome?
Main Olympic Village	66	772	1061	State-secured loan	Apartments
Main Media Center	246	1274	417	Public	Exhibition center
Olympic Park		328	n/a	Public	Recreation, Formula 1
<i>Mountain cluster</i>					
Biathlon and cross-country complex	12	2478	20,759	State company	Training center
Bobsleigh track	120	249	107	Public	Training center
Ski jumps	29	298	922	State-secured loan	Training center
Snowboard and freestyle park	21	113	430	State-secured loan	Training center
Alpine skiing	240	396	65	State-secured loan	Ski resort (Roza Khutor)
Main mountain village	44	599	1251	State-secured loan	Hotel, apartments

Sports-related supporting infrastructure	n/a	4362	n/a	Mostly public	–
Non-sports-related capital costs	n/a	38,771	n/a	Mostly public	–
Combined rail–road link	n/a	10,546	n/a	Public	Severely reduced rail service
Other projects	n/a	28,225	n/a	Mostly public	–

Notes: All costs in nominal USD at average exchange rate of US\$1 = RUB 30.08.

Sources: own calculations based on Bidding Committee Sochi (2006); Olimpstroy (2014); Rozhkov (2014); Tovkaylo (2014); Zhemukhov and Orttung (2014).

\*Security costs are a minimum estimate from 2011; no current data have been published.

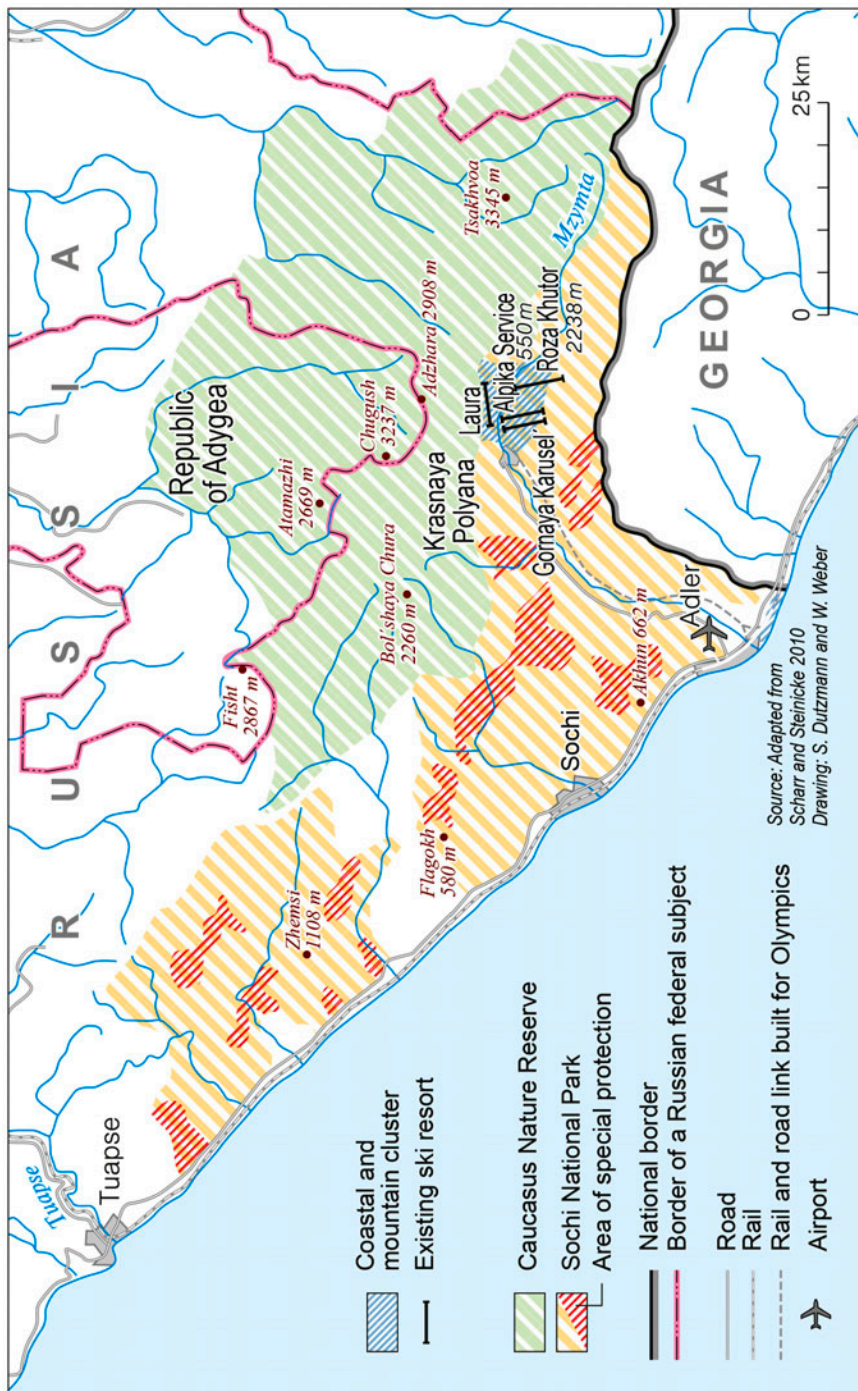


Figure 1. Map of post-Olympic Sochi with key infrastructure and coastal and mountain clusters.



as a share of total investments was previously only reached by Tokyo for the Summer Games of 1964 (Liao and Pitts 2006, 1247). Even in Beijing, which spent about \$40 billion for the Summer Games in 2008 to effect major urban transformations (Smith and Himmelfarb 2007), this ratio was only about 65 percent. It is these capital costs of \$51 billion that have been reported as total costs, ignoring operational costs, which add more than \$4 billion to the total.

What is striking with regard to operational costs is the size of the security budget. At a minimum of \$1.92 billion (57.8 billion rubles), it is more than twice the security cost of the previous Winter Games in Vancouver (estimated at \$0.84 billion [Canadian \$0.87 billion] [Government of Canada 2012]), and still quite significantly more than the security costs of the much larger London 2012 Summer Games (about \$1.62 billion [1.05 billion pounds] [Department for Culture 2012]).<sup>2</sup> The high cost reflects the salience of security in Olympic preparations, which

overshadowed most other issues that the Olympics were initially meant to address. Gradually, security concerns took precedence over economic issues and became central to ensuring that the safe conduct of the Games would promote a positive image of Russia and its leaders at home and abroad. (Zhemukhov and Orttung 2014, 26)

What contributed to the high security costs was not just the location of Sochi in the geopolitically unstable environment of the North Caucasus, with the de facto state of Abkhazia just across the internationally recognized border with Georgia. During the preparation period for the Games, authorities also perceived a growing threat from terrorist attacks and eventually found themselves confirmed by a series of attacks, particularly those in Volgograd in December 2013, just weeks before the Olympic Games. This environment resulted in what has been called “hyper-insecurity”: the allocation of money for security not on the basis of the probability of attacks, but on the basis of the very possibility that such an attack could occur (Zhemukhov and Orttung 2014, 14). As a consequence, Sochi became a veritable fortress during the Olympic Games, with several rings of progressive security checks physically isolating it from its surroundings and a strong presence of the military, in addition to regular security forces. The obligatory self-registration of visitors to the Olympic Games before going to Sochi through the introduction of a spectator pass made it possible for the authorities to obtain data records and prescreen all visitors.

But are all costs of Table 1 attributable to the Olympics? Organizers and state officials have maintained that not all expenditures should be counted as part of the event. According to them, the true cost of the event was \$7.1 billion (214 billion rubles), which, they claim, includes just the sports-related venues (Channel One 2014; *Russia Beyond The Headlines* 2014; *Russia Today* 2014). According to this view, all other costs were incurred as a result of the modernization of the larger Sochi region, which would have happened anyway and has long-term utility for the development of the region.

It is true that not all costs should be counted as unique costs of the event. Russia had indeed launched a so-called Federal Target Program for the development of Sochi as a winter sports resort before it won the right to host the Olympic Games, which included many measures that were not required for the event (Müller 2011). But \$7.1 billion is too low a figure for the total sports-related costs for three reasons. First, it leaves out operational costs of \$4.2 billion, which would not have been incurred without the event. Second, the figure of \$7.1 billion underestimates the costs of sports-related venues by some \$0.4 billion (12 billion rubles) (see Table 1). Third, it ignores the costs



for supporting infrastructure and site preparation for sports-related venues, for example, water and electricity supplies, access roads, telecommunications, and temporary structures. Since all venues were constructed from scratch, these expenditures were significant and added up to \$4.4 billion, i.e. more than half of the costs of the venues themselves. The total sports-related costs, including operating and capital costs, should therefore be placed at about \$16.1 billion.

The Olympics have also contributed to the remaining \$38.8 billion of ostensibly non-sports-related costs. This happened, first, because the Olympics increased the size of some of the infrastructure to fit Olympic peak demands. The largest project, a combined rail and road link between the coastal cluster and the mountain cluster, some 48 km apart (see Figure 1), which cost more than \$10 billion, is a case in point. It was built to handle 20,000 passengers per hour – several times the total number of rooms in the mountain resort of Krasnaya Polyana it serves. Second, the Olympic Games drove up the cost of the non-sports-related infrastructure by imposing a fixed deadline, enabling contractors to engage in profiteering by delaying construction work (Müller 2015c). This is a well-known phenomenon, which causes mega-events and related infrastructure to overrun their budgets much more than other mega-projects (Flyvbjerg and Stewart 2012). It was also present in Sochi, or as one investor put it: “we were in so much of a hurry in the end that we did not count the money” (Fedorova 2014). It is quite a surprise then that the organizers managed to keep the expenditure within the budget announced in February 2013 with amazing precision, when the costs had kept rising the years before. Still, the average nominal (i.e. without correcting for inflation) cost overrun for capital costs was 347% (see Table 1). In other words, while some of the infrastructure may not have been built specifically for the event, the event made it significantly more expensive. How much more expensive is difficult to establish in the absence of a counterfactual. But Flyvbjerg and Stewart (2012) calculate for other Olympic Games that their median cost overrun is about four times that of other mega-projects. If this also holds for Russia, more than half of the \$38.8 billion non-sports-related costs were cost inflation due to the Olympics that would not have occurred otherwise.

### Cost overruns and cost inflation of the Sochi games

Sochi was not just an expensive Olympic Games, but it also experienced significant cost overruns as the final budget was several times higher than the budget in the bid book. In nominal terms, the whole project became about 4.5 times more expensive than planned (\$55.0 vs. \$12.3 billion). The costs for venues escalated particularly strongly, with a nominal 585 percent cost overrun (337 percent in real terms after controlling for inflation). The Olympic Stadium and the Main Olympic Village came in 12 times more expensive than budgeted. These massive overruns are all the more surprising, considering that the bid book stated that “expenses are forecast on the ‘high side,’ recognizing that expenses for Olympic Winter Games are typically under-estimated at this stage” (Bidding Committee Sochi 2006, 99).

The changing scope of projects explains some overruns. The Biathlon and Cross-Country complex, for example, had to be relocated and had to have a separate “endurance village” for competing athletes because of the elevation difference with the Mountain Olympic Village. Some venues also had to conform to international sustainable building standards, a requirement that was introduced after the bid. On the other hand, however, the scope for some projects shrank. The road–rail link, for example, was downgraded to a two-lane road, after initial plans for a four-lane road, and the cargo

Table 2. Comparison of cost and cost overruns of Winter Games in Sochi 2014 with previous Olympic Games (operational costs plus sports-related capital costs).

Games	Country	Type	Final sports-related costs [bn \$2009]	Cost per event [mln \$2009]	Cost overrun (real terms, original currencies) [percent]	Cost overrun (nominal)
Sochi 2014	Russia	Winter	11.8	120	171**	324**
London 2012*	UK	Summer	14.8	49	101	133
Vancouver 2010	Canada	Winter	2.3	27	17	36
Beijing 2008	China	Summer	5.5	18	4	35
Torino 2006	Italy	Winter	4.1	49	82	113
Athens 2004	Greece	Summer	3.0	10	60	97
Salt Lake City 2002	USA	Winter	2.3	29	29	40
Sydney 2000	Australia	Summer	4.2	14	90	108
Nagano 1998	Japan	Winter	2.3	34	56	58
Atlanta 1996	USA	Summer	3.8	14	147	178
Lillehammer 1994	Norway	Winter	1.9	31	277	347
Barcelona 1992	Spain	Summer	11.4	44	417	609
Albertville 1992	France	Winter	1.9	33	135	169
Calgary 1988	Canada	Winter	1.0	22	59	131
Sarajevo 1984	Yugoslavia	Winter	0.01	0.3	173	1257
Lake Placid 1980	USA	Winter	0.4	11	321	502
Montréal 1976	Canada	Summer	6.0	30	796	1266
Grenoble 1968	France	Winter	1.0	29	201	230
Mean			4.3	31	174	313
Median			2.7	29	118	151
Maximum			14.8	120	796	1266
Minimum			0.01	0.3	4	35

Sources: Flyvbjerg and Stewart (2012); own calculations.

\*Estimates.

\*\*Cost overruns do not include cost for supporting infrastructure (for which no original budget was available).

port for bringing in construction material was downgraded from an annual capacity of 30 million tons to just 10 million. In fact, organizers were meant to cut the whole budget for the Olympics by \$10 billion (300 billion rubles) in 2009, when Russia's GDP contracted by 7.8% during the financial crisis (BBC 2009). Instead, it ended up almost \$40 billion (1200 billion rubles) higher than expected.

Even allowing for unforeseen expansions of scope, the costs of the event itself are still considerably above those of other Olympics (Flyvbjerg and Stewart 2012; Sokolov 2012). Sochi thus experienced not just cost overrun, but also cost inflation, meaning that cost rose beyond the typical costs of comparable events elsewhere. To conduct such a comparison, costs need to be deflated to the same base year and have the same scope. Flyvbjerg and Stewart (2012) have conducted the most comprehensive and transparent assessment of Olympic costs, and this paper uses their methodology for comparison. For this purpose, it first defines the scope of costs as the total sports-related costs, i.e. excluding non-sports-related capital costs, and then deflates them to 2009 as the base year.<sup>3</sup> For cost overruns, Flyvbjerg and Stewart assume that the bid was not able to predict inflation, thus they deflate final costs to the bid year to arrive at the cost overrun in real terms.

Table 2 shows that Sochi 2014 is in second place for the most expensive Olympics ever if considering only the real sports-related costs of \$11.8 billion (2009 values). It

ranks just behind London 2012, which reported estimated total costs of \$14.8 billion (2009 values). When the costs per sports event are calculated – one way of standardizing expenditure by controlling for the size of the Olympics – Sochi leaps to the front. Organizers spent \$120 million (2009 figures) on each of the 98 events – 2.5 times more than the next most expensive candidates. The president of the IOC, Thomas Bach, is thus wrong when he claims that “costs for the Sochi Games are entirely within the bounds of those of previous Games” (Süddeutsche Zeitung 2014).

In terms of real cost overruns of 171 percent, Sochi is near the mean, and there are a number of Olympic hosts, such as Lillehammer, Barcelona, Montréal, Sarajevo, and Lake Placid, that experienced higher real cost overruns. When not accounting for inflation, however, cost overrun increases to 324 percent. This is because the ruble experienced significant inflation during the preparation period; calculating cost overruns in real terms removes this factor. Organizers, however, had included inflation in their initial budgets (Government of the Russian Federation 2006a, vii), so the nominal value would be the more adequate measure to judge cost overruns for Sochi alone.

One justification of this high expenditure for the Olympics in Sochi has been that all facilities needed to be constructed from scratch. This is a highly unusual situation for an Olympic Games, where at least some facilities exist at the time of the bid in most locations, even if they need to be upgraded. But even when compared to similar new-build venues elsewhere, Sochi seems to have suffered cost inflation. Orttung and Zhemukhov (2014) list poor public oversight and democratic control as well as opaque decision-making as further drivers of cost overrun.

Another reason for the magnitude of expenditure and cost overruns is Russia's neopatrimonial political system. A report by the Fund for the Fight against Corruption (2014) argues that costs for venues in Sochi were 42 percent higher than elsewhere, attributing the differential to nepotism and corruption.<sup>4</sup> While the Russian Government denies that corruption affected the Sochi Games, opposition politician Boris Nemtsov, assassinated in March 2015, also documented in great detail how oligarchs close to Putin benefitted from state contracts and kickbacks (Nemtsov and Martynyuk 2013). Exacerbated through non-transparency and weak state institutions, the Sochi Olympics contributed to maintaining the neopatrimonial political system in Russia, enriching a select few through individual favors in exchange for political loyalty. As such, the Sochi Games played an important role for the distribution of resources in Russia's political economy (Orttung and Zhemukhov 2014; Trubina 2015b; see also Dawisha 2014).

Table 3. Sources of funding for capital costs of Sochi 2014 Olympic Games.

Source	\$million	Share
<i>Government</i>	29,222	57.7percent
Federal state	23,604	
Krasnodar province	2327	
City of Sochi	3291	
<i>State-owned companies</i>	11,403	22.5 percent
Gazprom	4920	
Russian Railways	2626	
Others	3856	
<i>State-secured loans</i>	8278	16.3 percent
<i>Private</i>	1762	3.5 percent
<b>TOTAL</b>	<b>50,665</b>	<b>100 percent</b>

Sources: Fund for the Fight Against Corruption (2014).

**Public vs. private: the sources of funding**

Initial plans for Sochi foresaw to attract sizable private investment for the preparation for the Winter Games. Strengthening the role of the private sector in the economy is one of the central pillars of the modernization agenda in Russia (Wilson Rowe 2014; Yakovlev 2014) and links up with the adoption of a neoliberal rhetoric in Russian urban politics that stresses growth, investment, and international competitiveness (Golubchikov 2010; Trubina 2015b). Sochi was meant to demonstrate modernization in action.

The government projected that investors would provide \$4.0 billion (119 billion rubles), or 38 percent of the initial budget (Government of the Russian Federation 2006b) – a figure that in 2010 rose to \$16.6 billion (500 billion rubles), or about half of the total budget (RIA Novosti 2010). But, as Table 3 demonstrates, the final share of genuine private contribution in capital costs was just 3.5 percent. The various levels of government contributed almost 58 percent, whereas state-owned companies added another 22.5 percent and state-owned banks the remaining 16 percent. With a public share of 96.5 percent of funding, the Sochi Games have the highest share of public money of any Olympic Games on record. Only the Montréal Olympics came close to this, with about 95 percent of the funding from the public sector (Preuss 2004, 15–20).

From the start, the private sector had demonstrated little interest in investing money into the preparation for the Olympic Games. Investors did not regard the sports venues as profitable and instead preferred to put their money into new hotels. Seeing that it would have to foot the bill alone, the Russian Government resorted to three measures to involve private investors. First, it asked for outright donations as part of companies' corporate social responsibility. This is how it procured the funding for the small hockey arena. The investor, UGMK Holding, saw funding it as a part of maintaining good relations with the Russian state. By donating it to the state after completion, it saved itself the costs of moving the stadium somewhere else, as it had originally promised, as well as the expenses of maintaining it (Aminov and Dzhumaylo 2013). The second measure was to saddle investors into tourism projects with the responsibility to provide Olympic facilities. Thus, Interros, the holding company of oligarch Vladimir Potanin, had to provide for the alpine skiing, freestyle, and snowboard facilities. This was combined with the third measure, which provided generous credit by the state-owned Vnesheconombank (VEB) to private investors – at discounted interest rates and covering an unusually high part of the total investment (up to 90 percent) of individual projects. Investors were loath to put their own money at risk, so VEB had to reduce the risk by offering favorable conditions (Orttung and Zhemukhov 2014), a process not uncommon in other Olympic host cities (Smith 2014).

As Table 3 shows, state-backed loans made up another 16.3 percent of total capital costs and financed many venues such as the upgrading of the airport. That the risks of these loans were indeed substantial became evident even before the Games, when investors asked for a grace period on interest payments to VEB (Tovkaylo 2013). By the middle of 2014, some months after the Games, VEB had already declared 70 percent of its Olympic loans as toxic and had canceled interest payments on them (Aminov and Kiseleva 2015). Defaults on interest rate payments or loan repayment effectively shifted the burden for this part of the Olympic expenditure to the Russian state and the Russian taxpayer. The additional financial stress after the introduction of the Western sanctions regime against Russia in the summer of 2014 and the depreciation of the ruble finally forced the Russian Government to recapitalize VEB in early 2015 (Farchy 2015).

Both the province (Krasnodar Krai) and the city of Sochi accumulated significant debt from expenditure for the Olympics. The province funded \$2.3 billion (70 billion rubles); the city \$3.3 billion (99 billion rubles) (see Table 3). As a consequence, debt levels rose from 3 percent of revenue in 2009 to 47 percent in 2013 (Fitch Ratings 2014). Because regional and local governments in Russia have little revenue raising power, this development forced the federal state to step in to guarantee and fund this debt.

The organizers of the Olympic Games nevertheless declared a profit of \$261 million (about 7.9 billion rubles) for the operational budget of the Games (Solovichenko and Vinogradova 2014), not counting the massive public subsidies to capital costs. Any such profit is notional, however, given both the cost overrun for the operational budget and the public subsidy of \$0.52 billion (15.6 billion rubles) to the organizing committee from the federal government. It is a mere function of the amount of subsidies received. Nevertheless, the announcement of this profit was embedded into a storyline underscoring the financial success of the Sochi Games. In view of the exorbitant total costs, the IOC was particularly keen on such a storyline so as to not discourage future bidders on tighter budgets (Gibson 2014). Along with the organizers, it considered all others costs as leaving a (positive) legacy and part of the investment package for the long-term development of Sochi as a mountain resort.

### Economic impacts of the Sochi Games

The Russian Government intended the Olympic Games in Sochi to be much more than a mere sports event. They were meant to become a catalyst for Sochi's development as a winter resort, which, together with its reputation for summer holidays, would turn the area into a year-round destination. The president of the IOC, Thomas Bach, underscored this at a press conference just before the opening of the Games:

The extra tens of billions of dollars [are] part of Russia's long-term investment to turn the area from a faded summer resort into a year-round destination and winter sports complex for the whole country. ... The Games are serving as the catalyst. (quoted in Wilson 2014)

The high total costs to the public as such would not be so much of a problem, if they indeed led to revenues that would justify these outlays. But this is hardly realistic. Let us assume that the \$51 billion of capital costs would have to be financed by floating Russian Government bonds. At 8.5 percent of current interest rates, just servicing the debt would require a massive \$4.4 billion *profit* per year. Each citizen of Sochi would have to contribute \$10,500 per year. Alternatively, Sochi would have to attract 4 million additional tourists per year that each generate \$1000 in taxes. Just servicing the debt would consume much of the annual budget of Krasnodar Province (about \$6 billion [181 billion rubles] in 2015). The cost of the Games is thus out of proportion to any potential income – whether as tax revenue or employment – that could be gained from it.

Even private sector investment, which needs to accord a greater role to return-on-investment, is struggling to become profitable, despite the provision of state-of-the-art infrastructure by the Russian state. The owners of the ski resorts and of the Olympic villages do not expect to recoup their investments (Fedorova 2014). Three factors play an important role here. For one thing, their costs had been excessive because of the expensive requirements of Olympic construction, for example, for security, accessibility, and size. For another, the overcapacities due to excessive construction of hotels have led to a drop in prices and thus revenues. Third, interest on loans is so high as to make

it next to impossible to even service the debt. When the Russian Central Bank hiked interest rates from 10.5 percent to 17 percent in December 2014, this exacerbated the situation even more. Creditors had to give a grace period to Olympic debtors and the regional government provided additional breaks on property taxes so as to avoid pushing debtors into default (Fedorova 2014; Kulchitskaya 2014).

Choosing Sochi as the host for the Games moreover did not happen at a particularly auspicious time for maximizing the economic impact from public spending. In 2007, the region was among the fastest growing in Russia, with hardly any unemployment (Kommersant 2010). Although the spending acted as a stimulus during the economic downturn after 2008, it would have created more additional output in other regions of Russia. In addition, the sudden rise in demand for building materials and construction labor precipitated a price rise and resulted in increased inflation. As a consequence, construction workers, machinery, and other inputs had to be brought in from outside the region, reducing the economic impact for Sochi itself. The \$51 billion of capital spending in a region of barely 400,000 inhabitants resulted in an extreme spatial concentration of funds, with a spending of about \$125,000 per inhabitant. At this level of spending, the marginal utility of each additional dollar invested declines rapidly. A more equal distribution of spending across Russia would have produced much higher marginal utilities. Despite all this, the rhetoric of regional development attached to the Sochi Games did not fail to produce an effect – 51 percent of the Russian population regarded the Sochi Olympics as an economic boon, when questioned in a poll at the end of 2014 (Vasilyeva 2015).

### Effects of the Sochi Games on tourism

If the extent of spending for the Olympics in Sochi cannot be justified via the immediate economic impact, one could still argue that the new roads, railways, hotels, and leisure facilities help to attract more tourists. That is certainly the main line of argument of supporters of the Olympic project (Sochi Legacy Report 2014), who expect an increase in tourist arrivals of about 30 percent (Petrova 2014b). Once the prime Soviet spa resort, Sochi languished after the collapse of the Soviet Union (Scharr, Steinicke, and Borsdorf 2011). In the 1990s, the majority of Russians did not have enough wealth to be able to afford holidays, and when economic growth started to benefit more and more people from the 2000s onwards, they preferred destinations in Egypt and Turkey, which offered better value for money over the lackluster Soviet resorts of old. The Russian Government saw the Winter Olympics as a lever to bring the accommodation and infrastructure standard up to par with the competitors abroad, particularly in Europe. So much so that the new mountain resort of Krasnaya Polyana was built to even resemble, in somewhat eclectic fashion, the imagined architectural style of a “European resort” (Trubina 2015b). The high hopes seemed to be vindicated when hotel rooms in Krasnaya Polyana were stretched to capacity during the New Year holidays of 2014/2015 (RIA Novosti 2015).

But the preparation for the Sochi mega-event has expanded room capacity by so much that this has led to destructive competition for survival among hotels during much of the year. When Sochi was awarded the Games in 2007, it had 31,000 rooms, of which only about 1700 were classified according to the international star system (Petrova 2014b). The construction added another 27,000 rooms, almost exclusively in the three-star (about 13,500 rooms), four-star (about 10,000), and five-star (about 2100) segments to satisfy accommodation requirements for the Olympic Games (Sochi Legacy



Report 2014). The size of the total room inventory now puts Sochi in about the same league as large resorts such as Cancún in Mexico (Puls et al. 2013).

To keep occupancy rates at the same level as before the Olympics, overnight stays would have to double. Achieving such growth in the number of visitors is a tall order, certainly in the short run, but looks difficult even in the long run. Hoteliers have been complaining about Russians' preference for cheaper hotels and B&Bs, which capture about three-quarters of the market in Sochi (Fedorova 2014). This leaves the new upmarket hotel capacity in Sochi fighting for a small share of the market. Due to the seasonality of demand, most places struggled to reach a 50 percent occupancy rate, even before the expansion of supply through the Olympics (Jones Lang Lasalle 2014). After the Olympics, despite a 22 percent increase in tourist arrivals in the peak summer season in 2014, the occupancy rate was just about 40 percent, whereas it used to be at 70 percent to 90 percent (Aminov and Kiseleva 2015). During the off-season, occupancy rates are as low as 8 percent, even for the new hotels (Weaver 2014).

Some hotels have responded to this situation by offering extensive discounts. As a result of this intense competition and the depreciation of the ruble, Sochi is now one of the cheapest international destinations for a luxury holiday. The new five-star Marriott Hotel in Krasnaya Polyana, for example, offers rooms at 3000 rubles (about US\$48 at exchange rates of February 2015) during the off-season and for about double that during the high season. The annexation of Crimea in March 2014 made the situation worse since the beaches there are Sochi's immediate competitors in summer tourism. With the annexation, the Russian Government has started pouring money into subsidizing flights to Crimea and getting the tourism industry up and running again to hasten integration of the peninsula into Russia.

What works in Sochi's favor, on the other hand, is the depreciation of the ruble. In the 12 months after the Olympic Games, the ruble lost almost half of its value against the US dollar and the Euro, which effectively doubled the cost of holidays abroad for Russians. With the price competition among hotels, Sochi has now become good value for money for holidaymakers and, with the addition of winter tourism, is likely to post growth in tourist arrivals in the coming years.

Table 4. Overview of the four ski resorts in Krasnaya Polyana.

	Roza Khutor	Gornaya Karusel'	Laura	Alpika service
Owner	Interros (Vladimir Potanin)	Sberbank	Gazprom	Gazprom
Length of runs (km)	77	25	20	30
Highest elevation	Roza Pik (2320 m)	Black Pyramid (2300 m)	1800 m	Aibga (2238 m)
Cable cars	18	12	14	7
Olympic facilities	Alpine skiing, snowboarding, freestyle	Ski jump	Biathlon, cross-country skiing	Bobsleigh
Rooms	1636 hotel rooms	1625 hotel rooms 1335 apartments	1413 hotel rooms	n/a

Sources: Alpika Service (2015), Gazprom (2015), Gornaya Karusel' (2015), Roza Khutor (2015), Sochi Legacy Report (2014).

Sochi has also benefitted from Western sanctions against Russia and subsequent Russian retaliation. At the end of 2014, a total of about 4 million government employees were banned from leaving the country, including staff from the Ministry of the Interior (1.3 million), the Ministry of Defense (2.0 million), and several other state agencies in Russia. In total, almost 5 percent of the Russian population is not allowed to travel abroad – a share unprecedented in post-Soviet history (Ryzhkov 2014). With the weakness of the ruble, this led to a slump of between 20 percent and 50 percent in the number of bookings for holidays abroad in the summer of 2014 (Panin 2014). Some of those forced to stay at home instead sought out Sochi (Weaver 2014), and many Russians who would be allowed to travel, if they could still afford it, feel less comfortable going on holiday to a Europe that appears increasingly antagonistic. On the other hand, however, this focus on the domestic market exacerbates the effects of seasonality, which many international resorts manage to attenuate by attracting clientele from different countries with staggered holiday periods.

The appeal of Sochi to European tourists, however, remains limited to ski enthusiasts. Its skiing areas are small by international standards, with trails barely reaching 80 km, as Table 4 shows, and the visa process makes it cumbersome to book a holiday. Moreover, it is time-consuming to get to Sochi from anywhere outside Russia, because almost all flights require a transfer in Moscow, thus taking one day of traveling each way. It is thus unlikely that Sochi will be able to grab a sizable share from its competitors in the international market, the most obvious one being Bulgaria; but it also does not have to, given the vast size of its domestic market.

Besides overcapacity, Sochi suffers from a lack of coordination of the tourism offers. The Olympic Park does not have a single management and so each venue owner acts single-handedly when putting on events, which leads to conflicting claims over resources. The problem is even more pronounced with the four ski resorts (Table 4 and Figure 1). While Roza Khutor has a total ski run length of 77 km, the other three resorts are not large enough to sustain more than one or two days' worth of skiing. Linking them up would create a much bigger resort and would have been advisable from the start, but investors did not move on this in the pre-Olympic haste. Now, the owners lack the capital to link the resorts, an investment thought to cost between 1200 and 1700 million rubles (\$17 to 25 million at exchange rates of January 2015) – a small amount considering the overall cost of the Olympics (Fedorova 2014).

Against this background, the administration in Sochi and actors from the tourism business have asked the Russian Government for further funds to transform the facilities from their current orientation toward Olympic requirements for normal operation. Oleg Deripaska, owner of Basic Element, which, in turn, owns the airport and the Olympic village, estimated that it would take about another 10–15 percent of the investment made so far and two to three years to make Sochi ready as a holiday resort (Petrova 2014a). Apparently not content with the publicity afforded by the Olympics, Sochi officials have also suggested another advertising campaign.

The Russian Government has declined all requests for further direct funding. During a press conference in February 2014, Putin left no doubt that Sochi had had its fill of subsidies:

Money is limited and just imagine that we now take money, say, from the Altai region to invest it here, in Sochi, where we have already invested dozens of billions. ... You can hardly count on additional investment after the colossal resources that have flowed here. (Interfax Russia 2014)

The dire economic straits of debtors of state-guaranteed loans, however, make additional subsidies likely so as to avoid outright defaults. In addition to the grace period and tax breaks mentioned above, the Russian Government has been considering enacting a number of other measures that would provide indirect subsidies. Thus, authorities have voiced plans to turn part of the Olympic development into a gambling zone to further encourage tourism and to move state-sponsored events, such as summits or annual general meetings of state-owned companies, to Sochi (Tovkaylo 2013). What is certain is that without a sustained growth of tourist arrivals to double or triple the number of tourists, or continued subsidies, tourism businesses will either be forced into bankruptcy or operate at a loss.

### Further use of the Olympic venues

While there is some chance that most of the hotel industry in the Sochi region will survive with the support of state largesse and growing tourist numbers, the prospect for the venues is much bleaker. Most of the venues in the mountain cluster will be used as training sites for future Olympic athletes (see Table 1), but the future for the six stadiums and the main media center in the coastal cluster is uncertain. The initial, rather vague, plan was to repurpose them for exhibitions and events like conventions, concerts, and shows (Bidding Committee Sochi 2006). In 2011, it became clear that Sochi would not be able to fill so much exhibition and event space, and organizers voiced plans to dismantle the two smallest venues (the small hockey stadium and the curling arena) and ship them to other Russian cities (Jones Lang Lasalle 2014). This, however, would have cost more than the construction of the venues. While touted publicly as one of the beacons of a sustainable legacy of the Games, the owners quietly shelved plans to this effect as the Games drew closer (Fedorova 2014).

The current after use of the Olympic Park and its venues is piecemeal. The Park sees few tourists because of the absence of attractions and its remoteness relative to the city center and the main beaches. The after use that exists is mostly not specific to the purpose of the venues, i.e. it does not use the venues for what they were built. The speed skating oval is now home to a tennis academy, the figure skating stadium might become a velodrome, and the small hockey stadium is a sports center for children (see Table 1). This partial or full decommissioning of venues and the changes in use have also led a major part of the sustainability program for the mega-event ad absurdum. Organizers hailed the implementation of sustainable building principles, following the British BREEAM (Building Research Establishment Environmental Assessment Methodology) standards, as one of the biggest achievements of a green Sochi Games (Müller 2015a). It ensured that the venues in the coastal cluster conformed to the highest standards for the efficient use of resources such as electricity and water, and for the reduction of waste. But as the venues are not operated as venues for the most part, they fail to be sustainable in the first place.

Other after-use plans require significant investments. The Olympic Stadium, which hosted just two events, the Opening and the Closing Ceremony, is undergoing reconstruction for hosting several matches during the 2018 Football World Cup to be held in Russia, but for that purpose, it will have to be expanded by another 5000 seats and converted for an additional cost of 3.5 billion rubles (\$52 million) (RIA Novosti 2014). What will happen after the four to five matches of the World Cup have been played is unclear since Sochi lacks a football club to fill a stadium of this size. The existing

football stadium has just over 10,000 seats and has sold out only once in its entire history (Nemtsov and Milov 2009).

High maintenance and operation costs also hamper the after use. Authorities initially estimated the annual costs at about \$233 million (7 billion rubles) (RBK Russia 2014), but then revised this figure upwards to \$399 million (12 billion rubles) (Volkov 2014). This amount is equal to 6.5 percent of the budget of Krasnodar Krai, the post-Olympic owner of most of the venues. It is hard to see how the revenues from the after use would cover these costs, let alone recoup the construction costs for the venues. As a consequence of both the excessive construction costs and the facilities operating at a loss after the Games, the holding company of Krasnodar Krai is now facing bankruptcy proceedings (Perova 2014).

The highest profile after use, however, adds another loss-making item to the bill – the Grand Prix of Sochi. Every autumn from 2014 until at least 2020, Sochi will attract 65,000 spectators for three days of races. The Formula 1, however, is not an after use *sensu stricto* since it does not make use of the venues, but merely features them as a backdrop. The construction of the fenced racetrack and of a separate grandstand has even hampered further use of the venues because it has made accessing them more difficult and has resulted in conflicts between the operators of the racetrack and those of the venues (Fedorova 2014). The racetrack required an additional investment of RUB 11 billion (US\$366 million) (Vorob'ev 2013) and incurs about \$50 to \$60 million in operating costs each year, plus hosting fees paid to the Fédération Internationale de l'Automobile (FIA) and in the order of \$40 million annually. Commonly, the racetrack operator recoups the hosting fee from ticket sales, whereas the remaining operating costs have to be born, again, by the state (Sylt and Reid 2013). With global attention on Sochi's Grand Prix each year and the stadia a prominent background, questions about the after use of the venues will linger. Russia will hardly be able to abandon maintenance altogether – the cheapest option of all.

### Sochi's post-Olympic infrastructure

The preparation for the Olympic Games in Sochi started with a great promise: “All of this is going to be used by millions and millions of citizens – even before the Games and many years after” (Vladimir Putin, quoted in RIA Novosti 2007). One of the big hopes attached to the Sochi Games was to increase people's quality of life in exchange for the years of disruption and construction they had to endure in the run-up to the mega-event. And indeed much has been achieved on this count; Sochi now has bypass roads that alleviate the traffic on its main thoroughfare and a fast road connection from the coast to the mountains. With several new power stations, it also boasts a more reliable energy supply. The implementation of new standards of urban planning pushed accessibility to the top of the agenda, with widespread level access for mobility-impaired groups such as wheelchair users or people with strollers. Cycling and other means of slow transport have received more attention and separate road spaces. These improvements play to visions of a global modernity, a phenomenon that can be found with other large infrastructure and city-building projects across the post-communist countries (e.g. Collier 2011; Koch 2010) and, for the case of Sochi, is discussed at length elsewhere (Alekseyeva 2014; Trubina 2015b).

However, the most ambitious and expensive project – and the most advertised one – has not come off the ground. The railway connection from Sochi and the airport to the mountains has not become, as its name *lastochka* suggests, a swallow, but rather a lame

Table 5. Estimation of future costs of Sochi Olympic venues and tourist infrastructure.

	Cost per year [\$million]
Venue operation and maintenance	399
Formula 1 operation	55
Tax break for owners of Olympic infrastructure	133
Moratorium on interest on mortgages	632
Total	1219

Sources: Kulchitskaya (2014), Sylt and Reid (2013), Tovkaylo (2013), Volkov (2014).

duck. Its first problem had to do with the routing, which turned the station at the airport into a branch line, as is evident from Figure 1. This both thinned out service to the airport to a frequency of less than one train an hour, which made the train uncompetitive vis-à-vis road transport, and also made it necessary to change trains if one wanted to travel from the airport to the mountains. The schedule of trains, however, was not synchronized, causing long waiting times for that journey. On top of this, the operator, Russian Railways, completely suspended the train service to the airport at the start of the winter high season at the end of 2014. Even between Sochi and Krasnaya Polyana, there operated just six train pairs a day, taking on average 45 min to cover the 48 km from Adler to Krasnaya Polyana. In the low season, this frequency drops to three train pairs per day.

This incisive reduction of service, virtually incapacitating the train line, is the consequence of an unresolved dispute between the operator, Russian Railways, and the provincial government. Regulation forces Russian Railways to operate the lines at a significant loss, selling tickets from Sochi to Krasnaya Polyana for 112 rubles (\$3.72) instead of 1200 rubles (\$39.90), which would cover operating costs. The provincial government has been unwilling to compensate for that loss because it is waiting for reimbursement from the federal government, so Russian Railways has cut back the service offered (Vorob'ev 2014). The upshot of this conflict is a new \$10 billion road–railway connection – with the highest per-kilometer cost for rail construction worldwide – where the branch to the airport is completely abandoned and the main line sees just six trains per day in each direction. This failure to utilize the new transport links diverges from international experience with mega-event infrastructure construction. While the underutilization of Olympic venues is common, transport infrastructure usually manages to escape the fate of becoming a white elephant (Bovy 2010; Kassens-Noor 2012).

Even with the smaller projects, which have generally been more successful in living up to their intended purpose, what was achieved was much less than what could have been achieved, had it not been for the pressure of the Olympics. One key concern is that projects worth about 7.5 billion rubles (US\$250 million) were planned but never finished. The city incurred expenses for their planning and design, but the projects were never carried out. With companies that worked for the Olympics moving away from Sochi, the city's tax revenue and total budget are projected to decline in the coming years, which makes finishing the projects even more unlikely (Lavrova 2014). As a city official commented, "There is no money for the further development of the city" (quoted in Lavrova 2014).

Another concern is the poor standard of what has been built. Rushed to completion during the final months or weeks before the Games, infrastructure often did not meet the quality standards or was commissioned without due inspection. Taking advantage of the time pressure, subcontractors had an incentive to build the objects to work for the event,

but to save money on making them last. Roads, for example, were not built with adequate protection against flooding, and the cargo port was not able to withstand an extreme weather event (BBC 2014). As a result of this haste, maintenance costs are likely to escalate down the road, as objects break down and need early maintenance due to accelerated wear and tear, presenting a further drain on the city budget. Residents of Sochi got a first taste of this as elevators, built to make train stations or pedestrian overpasses accessible, were switched off after the Paralympic Games (Serebryannikov 2015).

The oversized and expensive infrastructure and the dire economic situation of many investors will thus require funding for years to come. Table 5 lists an overview of expenses and foregone interest that the government has already announced, including the costs for the maintenance and operation of Olympic venues, the operation of Formula 1, tax breaks for owners of Olympic infrastructure, and the moratorium on interests owed for mortgages with Vnesheconombank. Future event-induced costs add up to more than \$1.2 billion per year, of which \$400 million are for maintenance and more than \$750 million for foregone revenue. This is not counting the cost of other measures, such as moving state-sponsored events to Sochi, which is a net loss somewhere else in Russia.

### Image of Russia and the event

One of the major goals of the Sochi Olympics was to project an image of a new Russia to the outside world – a Russia that would live up to the slogan of the Olympics: “Hot. Cool. Yours.” The slogan encapsulates an appeal to the hedonistic individual – fun-loving, recreation oriented – and seeks to do away with the prevailing global image of Russia as a *bête noire* in world politics and a cold place with low customer-orientation and unfriendly people as portrayed in global travel imaginaries. Thus, a report from the World Economic Forum placed Russia on rank 138 out of 140 as one of the least welcoming tourist destinations in the world (Blanke and Chiesa 2013). The Sochi Olympics were meant to tackle this predicament and to attract more tourists to the city and the country.

Gaining international recognition for Russia was one of the principal driving forces of Sochi 2014. As Putin put it, the Sochi Games are “without doubt a recognition of the achievements of Russia, not only in sports, and they are certainly a general judgment of our country” (quoted in RIA Novosti 2007). Harnessing mega-events for international communication is common across emerging countries hosting mega-events, whether it is China, India, South Africa, or Brazil. The aim is “to showcase economic achievements, to signal diplomatic stature or to project ... soft power” (Cornelissen 2010, 3008). In Russia specifically, the Olympic Games became tied up with Russia’s project to regain recognition as a great power (Alekseyeva 2014; Persson and Petersson 2014).

The goal of improving Russia’s global image, however, never advanced beyond mere rhetoric. It already faced strong headwind during the preparation for the Games (Arnold and Foxall 2014; Gronskaya and Makarychev 2014), when critical reports about corruption and delays started to spread in the international media (e.g. Gibson 2013; Myers 2014; The Economist 2013), and even an IOC member publicly denounced the corruption in the preparation for the event (The Guardian 2014).

Critical international media also shone a spotlight on the Circassian question surrounding the Olympic Games, although this theme was much less prominent than that of corruption. The Circassians, an ethnic group from the North Caucasus, had launched a campaign that drew attention to the silenced Circassian history of the Sochi area and the violent Russian conquest of the Caucasus, which ended just 150 years prior to the Games, in 1864. The last decisive battles took place around Sochi, and the Russian



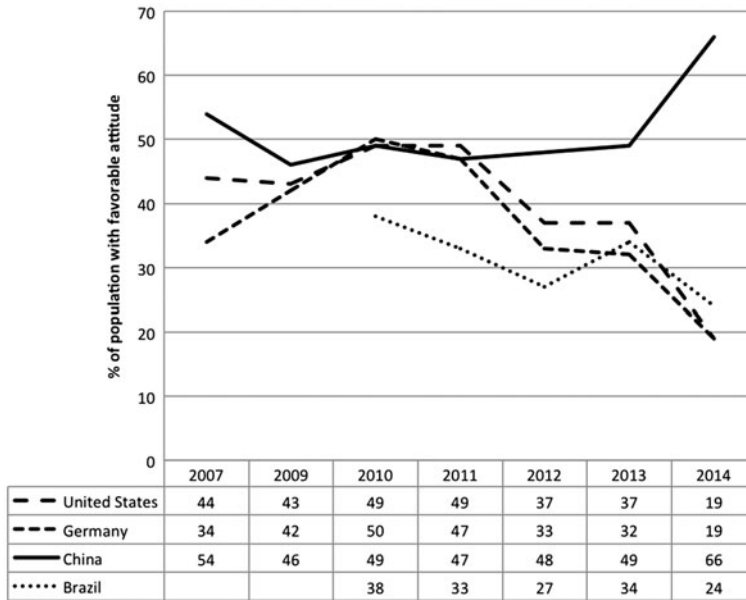


Figure 2. Favorable attitudes toward Russia in selected countries, 2007–2014.  
Source: Pew Research Center (2014).

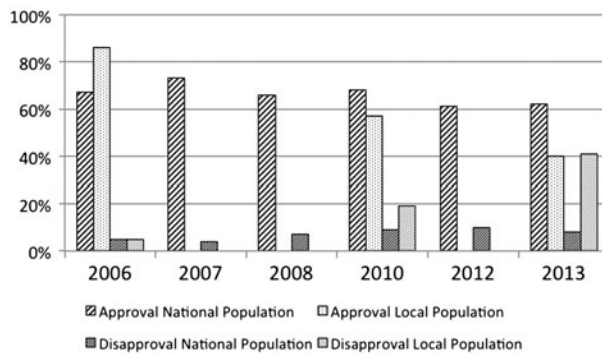


Figure 3. Domestic approval (national and local) of hosting the Sochi 2014 Winter Olympic Games in Russia.

Sources: Fond Obshchestvennoe Mnenie (2013), Müller (2012), Bidding Committee Sochi (2006), Vetitnev and Bobina (2014).

Empire deported many Circassians through the port of Sochi, creating a large diaspora. Although many of the place names for the Olympics are Circassian – the name “Sochi” itself and the name of the Olympic Stadium “Fisht,” the organizers avoided the Circassian question during the preparation for the Olympics (Zhemukhov 2009).

The passing of legislation “against the propaganda of non-traditional sexual orientation to minors” in June 2013, a piece of legislation that received little attention within Russia, produced the loudest and most consequential international uproar (Lenskyj 2014). It occasioned the boycott of the Olympics by the leaders of European states, such

as the German president Joachim Gauck, and prompted others, such as the US, to include openly gay members in their delegations to the Olympic Games as a sign of protest. If that was not enough, the annexation of Crimea and subsequent support of rebel forces in Eastern Ukraine (Biersack and O'Lear 2014; Dunn and Bobick 2014) destroyed any ambition of changing Russia's image in the world or shoring up its soft power credentials.

Even during the preparation for the Sochi Olympics, global attitudes toward Russia had become less positive in most parts of the world. While rising until about 2010, between 2011 and 2013, the share of people having favorable views of Russia declined in many countries in the West but also in the emerging world, the closer the Olympic Games drew. The dynamics of these views for the US and Germany as two major Western powers and China and Brazil as two major emerging economies are charted in Figure 2. With the intervention in Ukraine in 2014, views deteriorated considerably for the US, Germany, and Brazil, as well as for Europe and the Americas more generally (data not shown, but contained in Pew Research Center 2014). China, by contrast, is one of the few countries that started to look more favorably on Russia, tying in with a general warming of relations between the two countries at the political level in the aftermath of the events in Ukraine. For most other countries, however, whatever gains in global approval and recognition the Sochi Olympics may have secured for Russia were eventually wiped out by its role as an aggressor vis-à-vis Ukraine.

Domestically, public opinion toward the mega-event was lukewarm, with a strong rift running between the Russian population as a whole and local residents. Russians in general showed moderately high levels of approval throughout the preparation period, hovering between 61 percent and 76 percent, with a slight decline as the event came nearer (see Figure 3). This figure is somewhat lower than in other host nations of mega-events, where the mean rate of approval during the preparation period was 82.4 percent (Preuss and Solberg 2006).

The picture is rather different for residents of Sochi. Public opinion started out more enthusiastic than in Russia as a whole in 2006, with 86 percent supporting the event, but then plummeted, declining to 57 percent in 2010 and then 40 percent at the end of 2013, just before the Games. By that time, the share of local residents opposed to the Games had become as large as those in favor. Both in 2010 and in 2013, a majority saw the negative impacts from Olympic development overshadow the positive ones (Müller 2012; Vétitnev and Bobina 2014). This result may have to do with the prolonged disruptions the extensive construction program meant for people in Sochi, turning the whole region into a construction site for several years. It would be important to repeat studies of public opinion several years after the Games to see if opinion changes in retrospect. Yet, at least before the Games, the local population remained unconvinced that the Olympics were going to have a positive effect on the region, not seeing the value of a regional development program unprecedented in the history of post-Soviet Russia.

## Conclusion

Russia intended the Sochi Games to achieve two things: to facilitate a big push development of the region into a global, year-round holiday resort and to show to the world and its own population alike the face of a new, modern Russia. Yet, the results were sobering. As the opening ceremony approached, both international opinion toward Russia and domestic attitudes toward the Games deteriorated, instead of improving. The main legacy of the Games is oversized infrastructure at inflated prices paid for almost

exclusively by the public. While this applies to many mega-events elsewhere, also and particularly in emerging economies (Gaffney 2010; Maharaj 2011), the extent of underutilization and the expenditure for the infrastructure in Russia are unparalleled. As if the \$55 billion of total costs were not enough, the government will have to subsidize the operation and maintenance of venues, tourist, and transport infrastructures in the order of \$1.2 billion per year for the foreseeable future.

If the main goal was to upgrade the infrastructural base of Sochi, the federal target program, as initially envisioned, would have achieved the same or better results at a much lower cost. To be sure, many cities use mega-events as catalysts and self-induced shocks to break political deadlocks and leverage infrastructure projects that would not happen otherwise (Grabher and Thiel 2014; Kassens-Noor 2012). In Russia's hierarchical political structure, however, the federal target program would have faced little opposition and could have been implemented even without using the event as an accelerator. One could argue, of course, that the preparation for the Olympics in Sochi also served the neopatrimonial purpose of allocating rents and resources to political allies in exchange for past and future loyalty (Ortung and Zhemukhov 2014; Trubina 2015a). But this would also have been true for the federal target program, which would likely have resulted in a more efficient allocation of resources by comparison. Allocating resources in a reasonably efficient way is crucial even for neopatrimonial regimes, for rents need to be created before they can be distributed, and the natural resource sector can only create so much wealth. The, at least rhetorical, importance of modernization in Russian policy recognizes as much.

Yet, "after the game is before the game," as German football legend Sepp Herberger liked to quip. Even after the Olympic Games, neither the mega-event chapter nor the Sochi chapter are closed for Russia. In 2018, Russia will host the Football World Cup, and despite the intention to reform the planning and management process, costs, cost overruns, and oversized stadia are already a concern (Müller 2015b). Sochi, for its part, will play host to the Formula 1 until at least 2020 and to several matches of the Football World Cup in 2018. This, and continued subsidies to Olympic venues and infrastructure, will mean that federal monies will flow to the region for the years to come. With a recession of 4.5 percent of GDP forecast for 2015 and Crimea as another major drain on the federal budget, excesses of the kind that Sochi presents will become more difficult to fund and justify vis-à-vis the public.

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### Notes

1. For conversion from rubles (RUB) into US dollars (USD), the average exchange rate from the date of awarding the Winter Olympics (4 July 2007) to their conclusion (23 February 2014) is used for all conversions in this paper, except where indicated otherwise. This rate is US\$1 for RUB 30.08. This method smooths out exchange rate fluctuations. In all cases, the original ruble values are also reported to allow readers to apply different exchange rates.

2. It is likely that the actual cost of security was still higher since the \$1.92 billion (RUB 57.8 billion), reported in 2011, referred to just 40,000 personnel, whereas there were eventually more than 70,000 at the Games (Nikol'skiy 2014). The estimate in this paper thus is a minimum threshold, but no numbers have been confirmed, so this paper will apply this conservative estimate.
3. For making costs comparable among different Olympic Games, they were converted from Russian rubles (RUB), incurred during the preparation from 2007 to 2014, to US dollars for the base year of 2009. For this purpose, the costs in rubles were first inflated or deflated from the year in which they were incurred to 2009, using World Bank GDP deflators for Russia. They were then converted to US dollars using the average exchange rate for 2009 (US \$1 = RUB 31.74). This methodology follows Flyvbjerg and Stewart (2012) for comparison.
4. This figure depends heavily, however, on what other venues were chosen for reference, what costs were included, and how costs were made comparable – information that the report does not disclose.

## References

- Alekseyeva, Anna. 2014. "Sochi 2014 and the Rhetoric of a New Russia: Image Construction through Mega-events." *East European Politics* 30: 158–174.
- Alpika Service. 2015. "Alpika Service." Accessed January 30, 2015. <http://www.alpikaservice.com/>
- Aminov, Khalil', and Anatoliy Dzhumaylo. 2013. "'Olimpstroy' leg pod 'Shaybu' (Olimpstroy Ended up with the Puck/Stadium 'Shayba')." *Kommersant*, February 8. <http://www.kommersant.ru/doc/2122435/>.
- Aminov, Khalil', and Elena Kiseleva. 2015. "VEB ishchet olimpiyskuyu strakhovku (VEB is Looking for an Olympic Insurance)." *Kommersant*, July 3. <http://www.kommersant.ru/doc/2504102>.
- Argenbright, Robert. 2011. "New Moscow: An Exploratory Assessment." *Eurasian Geography and Economics* 52: 857–875. doi:10.2747/1539-7216.52.6.857.
- Arnold, Richard, and Andrew Foxall. 2014. "Lord of the (Five) Rings: Issues at the 2014 Sochi Winter Olympic Games: Guest Editors' Introduction." *Problems of Post-Communism* 61: 312. doi:10.2753/PPC1075-8216610100.
- BBC. 2009. "Russia Cuts 2014 Olympics Budget." *BBC*, February 17, sec. Europe. <http://news.bbc.co.uk/1/hi/world/europe/7894644.stm>.
- BBC. 2014. "'Olimpstroy' predyavil zagadochnyy isk merii sochi (Olimpstroy Files Mysterious Lawsuit against Mayor's Office in Sochi)." *BBC Russian*, September 2. [http://www.bbc.co.uk/russian/russia/2014/09/140902\\_sochi\\_olympstroy\\_lawsuit](http://www.bbc.co.uk/russian/russia/2014/09/140902_sochi_olympstroy_lawsuit).
- Bidding Committee Sochi. 2006. *Bid Book*. Sochi.
- Biersack, John, and Shannon O'Lear. 2014. "The Geopolitics of Russia's Annexation of Crimea: Narratives, Identity, Silences, and Energy." *Eurasian Geography and Economics* 55: 247–269. doi:10.1080/15387216.2014.985241.
- Blanke, Jennifer, and Thea Chiesa. 2013. *The Travel & Tourism Competitiveness Report 2013*. Geneva: World Economic Forum. <http://www.fitzroy.cl/wp-content/uploads/2013/05/Travel-and-Tourism-Competitiveness-2013-Fuente-WEF.pdf>.
- Bovy, Philippe. 2010. "'No Transport White Elephants': Mobility Planning for Mega-events." *ITS Magazine – The Magazine for Intelligent Traffic Systems* 2: 1618.
- Channel One. 2014. "Olympic Press Conference of Vladimir Putin." Channel One of Russia. <http://www.1tv.ru/news/polit/250475>.
- Chappelet, Jean-Loup. 2014. "Managing the Size of the Olympic Games." *Sport in Society* 17: 581–592. doi:10.1080/17430437.2013.834621.
- Collier, Stephen J. 2011. *The Post-Soviet Social: Neoliberalism, Social Modernity, Biopolitics*. Princeton, NJ: Princeton University Press.
- Cornelissen, Scarlett. 2010. "The Geopolitics of Global Aspiration: Sport Mega-events and Emerging Powers." *The International Journal of the History of Sport* 27: 3008–3025. doi:10.1080/09523367.2010.508306.
- Dawisha, Karen. 2014. *Putin's Kleptocracy: Who Owns Russia?* New York: Simon & Schuster.

- Department for Culture, Media and Sport. 2012. London 2012 Olympic and Paralympic Games Quarterly Report, June 2012. London. [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/78228/DCMS\\_GOE\\_QR\\_JUNE-2012.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78228/DCMS_GOE_QR_JUNE-2012.pdf).
- Dixon, Megan. 2010. "Gazprom versus the Skyline: Spatial Displacement and Social Contention in St. Petersburg." *International Journal of Urban and Regional Research* 34: 35–54. doi:10.1111/j.1468-2427.2009.00871.x.
- Dunn, Elizabeth Cullen, and Michael S. Bobick. 2014. "The Empire Strikes Back: War without War and Occupation without Occupation in the Russian Sphere of Influence." *American Ethnologist* 41: 405–413. doi:10.1111/amet.12086.
- Farchy, Jack. 2015. "Russia Considers Creation of 'Bad Bank' to Aid Financial Sector." *Financial times*, January 28. <http://www.ft.com/cms/s/0/11e60ab6-a6d8-11e4-9c4d-00144feab7de.html#axzz3Q8aBYrbs>.
- Fedorova, Margarita. 2014. "Postolimpiyskiy Sindrom (Post-Olympic Syndrome)." *Kommersant*, December 17. <http://kommersant.ru/projects/sochi>.
- Feklyunina, Valentina. 2008. "Battle for Perceptions: Projecting Russia in the West." *Europe-Asia Studies* 60: 605–629. doi:10.1080/09668130801999888.
- Fitch Ratings. 2014. "Russian Winter Olympics Debt Manageable for Region." *Fitch Ratings*, February 4. [https://www.fitchratings.com/gws/en/fitchwire/fitchwirearticle/Russian-Winter-Olympics?pr\\_id=819591&cm\\_sp=homepage-\\_FitchWire-\\_%20Russian%20Winter%20Olympics%20Debt%20Manageable%20for%20Region](https://www.fitchratings.com/gws/en/fitchwire/fitchwirearticle/Russian-Winter-Olympics?pr_id=819591&cm_sp=homepage-_FitchWire-_%20Russian%20Winter%20Olympics%20Debt%20Manageable%20for%20Region).
- Flyvbjerg, Bent, and Allison Stewart. 2012. *Olympic Proportions: Cost and Cost Overrun at the Olympics 1960–2012*. Said Business School Working Paper, University of Oxford.
- Fond Obshchestvennoe Mnenie (Foundation for Public Opinion). 2013. *Olimpiada-2014: rossiyane o podgotovke k sportivnym sostyazaniyam* (The 2014 Olympics: Russians opinion towards the preparation for sports competitions). <http://fom.ru/obshchestvo/11159>.
- Fund for the Fight Against Corruption. 2014. *Entsiklopediya trat Sochi-2014* (Encyclopedia of Expenditure for Sochi 2014). Moscow: Fund for the Fight Against Corruption.
- Gaffney, Christopher. 2010. "Mega-events and Socio-spatial Dynamics in Rio De Janeiro, 1919–2016." *Journal of Latin American Geography* 9: 7–29. doi:10.1353/lag.0.0068.
- Gazprom. 2015. "Gazprom: Gorno-Turisticheskiy Tsentr (Gazprom: Mountain tourism center)." Accessed January 30, 2015. <http://polyanaski.ru/>.
- Gel'man, Vladimir, and Sergei Ryzhenkov. 2011. "Local Regimes, Sub-National Governance and the 'Power Vertical' in Contemporary Russia." *Europe-Asia Studies* 63: 449–465. doi:10.1080/09668136.2011.557538.
- Gibson, Owen. 2013. "Sochi 2014: The Costliest Olympics Yet but Where Has All the Money Gone?" *The Guardian*, October 9. <http://www.theguardian.com/sport/blog/2013/oct/09/sochi-2014-olympics-money-corruption>.
- Gibson, Owen. 2014. "Oslo Withdrawal from Winter Olympics Bidding is Missed Opportunity – IOC." *The Guardian*, October 2, sec. Sports. <http://www.theguardian.com/sport/2014/oct/02/oslo-withdrawal-winter-olympics-2022-ioc>.
- Golubchikov, Oleg. 2010. "World-city-entrepreneurialism: Globalist Imaginaries, Neoliberal Geographies, and the Production of New St Petersburg." *Environment and Planning A* 42: 626–643. doi:10.1068/a39367.
- Gornaya Karusel'. 2015. "Gorki Gorod." Accessed January 30, 2015. <http://www.gorkygorod.ru/>.
- Government of Canada. 2012. "Games Security and Public Safety for the Vancouver 2010 Olympic and Paralympic Games." Accessed January 15, 2015. <http://www.rcmp-grc.gc.ca/aud-ver/reports-rapports/pp-gs-ps-eval-eng.htm>
- Government of the Russian Federation. 2006a. *Rasporyazhenie Pravitel'stva RF Ot 23.01.2006 No. 58-R* (Order of the Government of the Russian Federation from January 23, 2006). <http://docs.procspb.ru/content/base/87802>.
- Government of the Russian Federation. 2006b. *O federal'noy tselevoy programme 'Razvitie G. Sochi KAK Gornoklimaticheskogo kurorta (2006–2014 gody)'* (On the federal target program 'Development of Sochi as a mountain resort [2006–2014]'). <http://docs.procspb.ru/content/part/487745>.
- Grabher, Gernot, and Joachim Thiel. 2014. "Coping with a Self-induced Shock: The Heterarchic Organization of the London Olympic Games 2012." *Social Sciences* 3: 527–548. doi:10.3390/socsci3030527.

- Gronskaya, Nataliya, and Andrey Makarychev. 2014. "The 2014 Sochi Olympics and 'Sovereign Power'." *Problems of Post-Communism* 61: 41–51. doi:10.2753/PPC1075-8216610103.
- Interfax Russia. 2014. "V razvitie Sochi dopolnitel'nykh vlozheniy ne budet (There Will Be No Additional Investments into the Development of Sochi)." *Interfax*, February 11. <http://www.interfax.ru/tourism/tourisminf.asp?id=357284&sec=1466>.
- IOC. 2014. *IOC Media Guide: Marketing Sochi 2014*. Lausanne: IOC.
- Jones Lang Lasalle. 2014. *Sochi 2014: Infrastructure, Growth, Redevelopment*. Moscow: Jones Lang Lasalle.
- Karbainov, Nikolay. 2013. "Kak izymayut sobstvennost' v olimpiyskikh stolitsakh (How Expropriations Work in Olympic Host Cities)." *Mir Rossii* 22: 106–131.
- Kassens-Noor, Eva. 2012. *Planning Olympic Legacies: Transport Dreams and Urban Realities*. London: Routledge.
- Keegan, Brian C. 2015. "The News on Wikipedia in 2014." *Brian C. Keegan*. Accessed January 7, 2015. <http://www.brianckeegan.com/2014/12/the-news-on-wikipedia-in-2014/>
- Kinossian, Nadir. 2013. "Stuck in Transition: Russian Regional Planning Policy between Spatial Polarization and Equalization." *Eurasian Geography and Economics* 54: 611–629. doi:10.1080/15387216.2014.901176.
- Kinossian, Nadir, and Kevin Morgan. 2014. "Development by Decree: The Limits of 'Authoritarian Modernization' in the Russian Federation." *International Journal of Urban and Regional Research* 38: 1678–1696. doi:10.1111/1468-2427.12159.
- Koch, Natalie. 2010. "The Monumental and the Miniature: Imagining 'Modernity' in Astana." *Social & Cultural Geography* 11: 769–787. doi:10.1080/14649365.2010.521854.
- Kommersant. 2010. "Sochi-2014: stavka na effektivnost." [Sochi 2014: A Bet on Effectiveness.] *Kommersant*, November 30. <http://www.kommersant.ru/doc/1539657>.
- Kulchitskaya, Diana. 2014. "Sochi Lawmakers Attempt to save failing Olympic Venues with Tax Break." *The Moscow times*, May 12. <http://www.themoscowtimes.com/business/article/sochi-olympic-venues-get-tax-break/499983.html>.
- Lankina, Tomila. 2009. "Regional Developments in Russia: Territorial Fragmentation in a Consolidating Authoritarian State." *Social Research* 76: 225–256.
- Lavrova, Lina. 2014. "Byudzhets Sochi-2015: 'trudnye vremena' nastupili (The Budget of Sochi 2015: The Hard times Have Begun)." *Sochi Express*, December 17. <http://www.sochi-express.ru/sochi/news/business/75312>.
- Lenskyj, Helen. 2014. *Sexual Diversity and the Sochi 2014 Olympics*. Basingstoke: Palgrave.
- Liao, Hanwen, and Adrian Pitts. 2006. "A Brief Historical Review of Olympic Urbanization." *The International Journal of the History of Sport* 23: 1232–1252. doi:10.1080/09523360600832502.
- Maharaj, Brij. 2011. "2010 FIFA World Cup TM: (South) 'Africa's Time Has Come'?" *South African Geographical Journal* 93: 49–62. doi:10.1080/03736245.2011.572473.
- Mäkinen, Sirke. 2011. "Surkovian Narrative on the Future of Russia: Making Russia a World Leader." *Journal of Communist Studies and Transition Politics* 27: 143–165. doi:10.1080/13523279.2011.564084.
- Müller, Martin. 2011. "State Dirigisme in Megaprojects: Governing the 2014 Winter Olympics in Sochi." *Environment and Planning A* 43: 2091–2108. doi:10.1068/a43284.
- Müller, Martin. 2012. "Popular Perception of Urban Transformation through Megaevents: Understanding Support for the 2014 Winter Olympics in Sochi." *Environment and Planning C: Government and Policy* 30: 693–711. doi:10.1068/c11185r.
- Müller, Martin. 2015a. "(Im-)Mobile Policies: Why Sustainability Went Wrong in the 2014 Olympics in Sochi." *European Urban and Regional Studies* 22: 191–209. doi:10.1177/0969776414523801.
- Müller, Martin. 2015b. *Event Seizure: The World Cup 2018 and Russia's Illusive Quest for Modernisation*. Working Paper. <http://dx.doi.org/10.2139/ssrn.2368219>.
- Müller, Martin. 2015c. "The Mega-event Syndrome: Why So Many Things Go Wrong in Mega-event Planning – And What to Do about It." *Journal of the American Planning Association* 81: doi:10.1080/01944363.2015.1038292.
- Myers, Steven Lee. 2014. "Putin's Olympic Fever Dream." *The New York Times*, January 22. <http://www.nytimes.com/2014/01/26/magazine/putins-olympic-fever-dream.html>.
- Nemtsov, Boris, and Leonid Martynyuk. 2013. *Zimnyaya olimpiada v subtropikakh* (Winter Olympics in the Subtropics). Moscow: mimeo



- Nemtsov, Boris, and Vladimir Milov. 2009. *Sochi i olimpiada* (Sochi and the Olympics). Moscow: Solidarnost'. [www.nemtsov.ru/files/Sochi\\_i\\_Olimpiada.pdf](http://www.nemtsov.ru/files/Sochi_i_Olimpiada.pdf).
- Nikol'skiy, Aleksey. 2014. "Sochi budet zashchishchat' tselaya armiya silovikov (A Whole Army of Security Officials Will Protect Sochi)." *Vedomosti*, January 31. <http://www.vedomosti.ru/sport/news/22122131/olimpijskaya-armiya-bezopasnosti>.
- Ortting, Robert, and Sufian Zhemukhov. 2014. "The 2014 Sochi Olympic Mega-project and Russia's Political Economy." *East European Politics* 30: 175–191. doi:10.1080/21599165.2013.853662.
- Panin, Alexander. 2014. "Ban on State Employees' Travel Abroad Sinks Russian Tour Operators." *The Moscow Times*, August 4. <http://www.themoscowtimes.com/business/article/ban-on-state-employees-travel-abroad-sinks-russian-tour-operators/504567.html>.
- Perova, Anna. 2014. "V 'Tsentr Omega' stuchatsya kreditory (Creditors Are Knocking on the Door of 'Omega Center')." *Kommersant*, December 20. <http://www.kommersant.ru/doc/2638111>.
- Persson, Emil, and Bo Petersson. 2014. "Political Mythmaking and the 2014 Winter Olympics in Sochi: Olympism and the Russian Great Power Myth." *East European Politics* 30: 192–209. doi:10.1080/21599165.2013.877712.
- Petersson, Bo. 2014. "Still Embodying the Myth? Russia's Recognition as a Great Power and the Sochi Winter Games." *Problems of Post-Communism* 61: 30–40. doi:10.2753/PPC1075-8216610102.
- Petrova, Yuliya. 2014a. "Sochi nuzhny novye investitsii i dva goda dlya konkurentsii s evropoy – Deripaska (Sochi Needs New Investment and Two More Years to Compete with Europe – Deripaska)." *Vedomosti*, February 10. <http://www.vedomosti.ru/sport/news/22553621/deripa>.
- Petrova, Yuliya. 2014b. "Posle olimpiady chislo turistov v sochi vyrastet na 30%, no gostinitsy ne budut zapolneny (After the Olympics the Number of Tourists Will Grow by 30%, but the Hotels Won't Be Full)." *Vedomosti*, February 24. <http://www.vedomosti.ru/realty/news/23211301/posle-olimpiady-chislo-turistov-v-sochi-vyrastet-na-30-no>.
- Pew Research Center. 2014. *Russia's Global Image Negative amid the Crisis in Ukraine*. Washington, DC: Pew Research Center.
- Preuss, Holger. 2004. *The Economics of Staging the Olympics: A Comparison of the Games, 1972–2008*. Cheltenham: Edward Elgar.
- Preuss, Holger, and Harry Arne Solberg. 2006. "Attracting Major Sporting Events: The Role of Local Residents." *European Sport Management Quarterly* 6: 391–411. doi:10.1080/16184740601154524.
- Puls, Sergio Lagunas, Ricardo Sonda, Miguel de la Rosa, Angel Olivares Urbina, and Natascha Tamara Post. 2013. "Analysis of the Room Supply in the Hotel Zone of Cancun, Mexico: EMU 9." *Journal of Tourism Research & Hospitality* 2: 1–8. doi:10.4172/2324-8807.1000114.
- Putin, Vladimir V. 2007. "Speech at the 119th International Olympic Committee Session." *Guatemala*, July 4. [http://archive.kremlin.ru/eng/text/speeches/2007/07/04/2103\\_type82912\\_type84779type127286\\_136956.shtml](http://archive.kremlin.ru/eng/text/speeches/2007/07/04/2103_type82912_type84779type127286_136956.shtml).
- RBK Russia. 2014. "Tkachev: raskhody na sodержanie olimpiyskikh ob"ektov sostavyat 7 mlrd Rub (Tkachev: Expenditure for the Maintenance of Olympic Objects Will Amount to 7 Bn Rubles)." *RBK*, February 14. <http://top.rbc.ru/economics/14/02/2014/905089.shtml>.
- Remington, Thomas F. 2015. "Why is Interregional Inequality in Russia and China Not Falling?" *Communist and Post-Communist Studies* 48: 1–13. doi:10.1016/j.postcomstud.2015.01.005.
- RIA Novosti. 2007. "Putin: Pobeda Sochi – Eto Priznanie Zaslug Rossii (Putin: The Victory of Sochi is a Recognition of Russia's Achievements)." *RIA Novosti*, July 5. <http://m.ria.ru/sport/20070705/68392366.html>.
- RIA Novosti. 2010. "Sochi Olympics Attract \$16.5 Bln in Private Investment." *RIA Novosti*, February 11. <http://en.rian.ru/sports/20100211/157850262.html>.
- RIA Novosti. 2014. "Mutko: stoimost' rekonstruktsii arena ChM-2018 v Sochi rasti ne budet (Mutko: The Cost of Reconstructing the Stadium in Sochi for the World Cup 2018 Will Not Rise)." *RIA Novosti*, October 22. <http://ria.ru/economy/20141022/1029509421.html>.
- RIA Novosti. 2015. "Rekordnoe chislo turistov priyekhlo v Sochi na novogodnye prazdniki (A Record Number of Tourists Came to Sochi for the New Year Holidays)." *RIA Novosti*, January 5. [http://ria.ru/ny2015\\_news/20150104/1041382738.html](http://ria.ru/ny2015_news/20150104/1041382738.html).
- Roza Khutor. 2015. "Roza Khutor: Kurort." Accessed January 30, 2015. <http://rosaski.com/>.

- Rozhkov, Aleksey. 2014. "Dmitriy Chernyshchenko: Olimpiada v Sochi Ne Byla Samoy Dorogoy v Istorii (Dmitriy Chernyshchenko: The Olympics in Sochi Were Not the Most Expensive in History)." *Vedomosti*, October 23. <http://www.vedomosti.ru/sport/news/35127351/dmitrij-chernyshchenko-olimpiada-v-sochi-ne-byla-samoj-dorogoj>.
- Russia Beyond The Headlines. 2014. "Counting the Cost: How Much Did Russia Spend and Earn in Sochi?" May 2. [http://rbth.co.uk/business/2014/05/02/counting\\_the\\_cost\\_how\\_much\\_did\\_russia\\_spend\\_and\\_earn\\_in\\_sochi\\_36321.html](http://rbth.co.uk/business/2014/05/02/counting_the_cost_how_much_did_russia_spend_and_earn_in_sochi_36321.html).
- Russia Today. 2014. "Sochi Was 'the Right Choice', Tourism and Investment to Follow Olympic Buzz." February 24. <http://rt.com/business/sochi-olympics-investment-tourism-441/>.
- Ryzhkov, Vladimir. 2014. "Controlling Russians through Travel Bans." *The Moscow Times*. May 26. <http://www.themoscowtimes.com/opinion/article/controlling-russians-through-travel-bans/500914.html>.
- Scharr, Kurt, Ernst Steinicke, and Axel Borsdorf. 2011. "Sochi/Сочи 2014: Olympic Winter Games between High Mountains and Seaside." *Revue de Géographie Alpine* 100: 1–35.
- Serebryannikov, Nikita. 2015. "Olimpiyskiy krest (Olympic crux)." *Rossiyskiy Turizm*. February 6. [http://russian-tourism.ru/investigations/investigations\\_9492.html](http://russian-tourism.ru/investigations/investigations_9492.html).
- Smith, Andrew. 2014. "'De-risking' East London: Olympic Regeneration Planning 2000–2012." *European Planning Studies* 22: 1919–1939. doi:10.1080/09654313.2013.812065.
- Smith, Christopher J., and Katie M. G. Himmelfarb. 2007. "Restructuring Beijing's Social Space: Observations on the Olympic Games in 2008." *Eurasian Geography and Economics* 48: 543–554. doi:10.2747/1538-7216.48.5.543.
- Sochi Legacy Report. 2014. *Sochi 2014 Legacy Report*. Sochi: Sochi Organizing Committee.
- Sokolov, Aleksandr. 2012. *Zatraty na Olimpiadu v Sochi rekordnye za vsyu istoriyu Olimpiyskikh igr* (Record expenditure for the Olympics in Sochi in the entire Olympic history). <http://igpr.ru/print/2646?titles=off>.
- Solovichenko, Mariya, and Elena Vinogradova. 2014. "Orgkomitet 'Sochi-2014' Zarabotal 5 Mlrd Rubley (The Sochi 2014 Organizing Committee Earned 5 Bn Rubles)." *Vedomosti*, April 7. <http://www.vedomosti.ru/sport/news/24986931/chernyshenko>.
- Sterkin, Filipp. 2013. "Zatraty na Olimpiadu vyrosli v 5 raz - do 1,5 trln rub (The Expenditure for the Olympics Rose 5 times - to 1.5 Trillion Rubles)." *Vedomosti*, February 4. [http://www.vedomosti.ru/finance/news/8689961/olimpiada\\_v\\_5\\_raz\\_podorozhala](http://www.vedomosti.ru/finance/news/8689961/olimpiada_v_5_raz_podorozhala).
- Süddeutsche Zeitung. 2014. "IOC-Präsident Bach in Sotschi: Schnee unter Sägespänen (IOC President Bach in Sochi: Snow under Sawdust)." *Süddeutsche Zeitung*, February 3, sec. Sport. <http://www.sueddeutsche.de/sport/ioc-praesident-bach-in-sotschi-schnee-unter-saegespaenen-1.1879058-2>.
- Sylt, Christian, and Caroline Reid. 2013. "The Cost of Hosting a Formula 1 Grand Prix." *BA Business Life*, March 1. <http://businesslife.ba.com/Ideas/Features/The-cost-of-hosting-a-Formula-1-Grand-Prix.html>.
- The Economist. 2013. "The Sochi Olympics: Castles in the Sand." *The Economist*, July 13. <http://www.economist.com/news/europe/21581764-most-expensive-olympic-games-history-offer-rich-pickings-select-few-castles>.
- The Guardian. 2014. "Putin Rejects Claims of Corruption over Sochi Winter Olympics." *The Guardian*, January 19. <http://www.theguardian.com/world/2014/jan/19/vladimir-putin-no-dan-ger-gay-winter-olympics-russia>.
- Tovkaylo, Maksim. 2013. "VEB podchital plokhie kredity na olimpiadu (VEB Has Counted Its Toxic Loans for the Olympics)." *Vedomosti*, November 27. <http://www.vedomosti.ru/sport/news/19268581/olimpiada-trebuets-restrukturizacii>.
- Tovkaylo, Maksim. 2014. "Razkhody na podgotovku k OLIMPIADE Sostavili 1,5 Trln Rub (The Expenditure for the Preparation of the Olympics Was 1.5 Trillion Rubles)." *Vedomosti*, July 1. <http://www.vedomosti.ru/sport/news/28385751/sochi-soschitan>.
- Trubina, Elena. 2015a. "Manipulating Neoliberal Rhetoric: Clientelism in the Run-up to International Summits in Russia." *European Urban and Regional Studies* 22: 128–142. doi:10.1177/0969776413512139.
- Trubina, Elena. 2015b. "Mega-Events in the Context of Capitalist Modernity: The Case of the 2014 Sochi Winter Olympics." *Eurasian Geography and Economics* 55: 610–627.
- Van Rheenen, Derek. 2014. "A Skunk at the Garden Party: The Sochi Olympics, State-sponsored Homophobia and Prospects for Human Rights through Mega Sporting Events." *Journal of Sport & Tourism, Online Edition*. doi:10.1080/14775085.2014.949287.

- Vasilyeva, Nataliya. 2015. "Oligarchs Unload Sochi Olympics Assets to Recoup Investment." *Associated Press*, February 5. <http://bigstory.ap.org/article/f064f5386bed4c55bf8fb6bf15a6dc1e/oligarchs-unload-sochi-olympics-assets-recoup-investment>.
- Vetitnev, Alexander, and Nadezhda Bobina. 2014. "The Attitude of Residents towards the 2014 Sochi Olympics (A Preliminary Report)." *European Journal of Physical Education and Sport* 3: 76–84.
- Volkov, Vladimir. 2014. "Sochi. Tayna 'Belykh Slo' (Sochi: The Secret of White Elephants)." *Ezhednevnyy Zhurnal*, April 22. <http://www.znak.com/urfo/news/2014-04-16/1021252.html>.
- Vorob'ev, Aleksandr. 2013. "Formula dlya 11 mlrd rub (Formula 1 for 11 Bn Rubles)." *Vedomosti*, September 26. <http://www.vedomosti.ru/newspaper/article/537521/formula-dlya-11-mlrd-rub>.
- Vorob'ev, Aleksandr. 2014. "'Lastochki' mogut ischeznut' iz Sochi v den' otkrytiya gornolyzhnogo sezona (The Fast Train 'Lastochka' Might Disappear from Sochi at the Opening Day of the Skiing Season)." *Vedomosti*, December 2. <http://www.vedomosti.ru/sport/news/36736381/v-sochi-ne-sezon-dlya-lastochek>.
- Weaver, Courtney. 2014. "Russia's Sochi Loses Tourism Lustre to Crimea." *Financial Times*, September 9. <http://www.ft.com/cms/s/0/68340ece-2170-11e4-b145-00144feabdc0.html#axzz3Qg8hak44>.
- Wilson, Stephen. 2014. "Bach: 'I Am Still Assured' of Security in Sochi." *Associated Press*, February 3. <http://bigstory.ap.org/article/bach-i-am-still-assured-security-sochi>.
- Wilson Rowe, Elana. 2014. "The Future, the Foreign and the Public–Private Divide: Socio-political Discourses around Skolkovo." *Journal of Eurasian Studies* 5: 39–47. doi:10.1016/j.euras.2013.09.003.
- Yakovlev, Andrei. 2014. "Russian Modernization: Between the Need for New Players and the Fear of Losing Control of Rent Sources." *Journal of Eurasian Studies* 5: 10–20. doi:10.1016/j.euras.2013.09.004.
- Zhemukhov, Sufian. 2009. "The Circassian Dimension of the 2014 Sochi Olympics." *PONARS Policy Memo* 65: 1–5.
- Zhemukhov, Sufian, and Robert Ortung. 2014. "Munich Syndrome: Russian Security in the 2014 Sochi Olympics." *Problems of Post-Communism* 61: 13–29. doi:10.2753/PPC1075-8216610101.